DOCUMENT RESUME

ED 215 688 IR 010 168

AUTHOR Cremmins, Ed; Trachtman, Marji
TITLE Use of Information Science Techniques by a Philosopher at Large.
PUB DATE May 81
NOTE 10p.; Paper presented at the Mid-Year Meeting of the American Society for Information Science (Durango, CO; May 1981). Best available copy.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Annotated Bibliographies; Cataloging; *Classification; Guides; Indexes; *Indexing; *Information Science; *Philosophy; Subject Index Terms
IDENTIFIERS *Adler (Mortimer J); Knowledge

ABSTRACT

This paper recounts the use of the information science techniques of subject indexing and annotation in the extensive writings and publications of the philosopher Mortimer J. Adler. A content analysis of Adler's "intellectual autobiography" is described, Adler's efforts as an indexer are reviewed, and some of Adler's thoughts on the practice of indexing are summarized. Adler's preparation and use of annotated bibliographies are also discussed. The relationships between some of the ideas presented in Adler's "How to Read a Book" and certain basic information science concepts and practices are briefly traced. An 8-item reference list and an information science subject index to Adler's "Philosopher at Large: An Intellectual Autobiography" accompany the text. (JL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED215688

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

USE OF INFORMATION SCIENCE TECHNIQUES BY A PHILOSOPHER AT LARGE

by

Ed Cremmins

and

Marji Trachtman

IR010168

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Edward T. Cremmins

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

USE OF INFORMATION SCIENCE TECHNIQUES BY A PHILOSOPHER AT LARGE

Ed Cremmins and Marji Trachtman
Tracor (JITCO), Inc.

Abstract

The extensive, unpublicized use of information science techniques by a non-information science practitioner, Dr. Mortimer J. Adler, was examined using a content analysis of his autobiography: Philosopher at Large: An Intellectual Autobiography. A slanted subject index comprised of information science terms (none of which appear in the original index accompanying Dr. Adler's autobiography) was created. Information science aspects of Dr. Adler's 238 collected works through 1977 that were evaluated include his Syntopicon to the Great Books of the Western World as a large-scale indexing effort; his Summa Dialectica ("...a dialectical summation of Western thought in the sphere of every one of its great ideas.") as a knowledge data base; and his reading guide How to Read a Book as a reference work for information analysts and scientists. Dr. Adler's application of techniques of bibliography construction, cataloging, and subject classification also were examined.

INTRODUCTION

Watson Davis, Hans Peter Luhn, Claire Schultz, Eugene Garfield, Saul Herner, Mortimer Taube, and Mortimer Adler. Most professionals in the field of information science will recognize at least one of the names on this list as that of one among the many renowned contributors to the development and application of information science techniques over the past 40 years. All of the names are appropriate except the last one--that of the philosopher, author, editor, professor, and director of the Institute for Philosophical Research, Dr. Mortimer J. Adler. In fact, a retrospective search of the literature on information science would retrieve no works by and probably no citations to Dr. Adler's writings. Nevertheless, Dr. Adler, in much of his research and scholarly writings over the past 50 years, has been using many of the same techniques that, although they are by no means exclusive to information analysts and scientists, have become common practice in this field. The techniques directly used by Dr. Adler include indexing, classification, cataloging, and bibliography construction, and, indirectly, data base development. In addition, Dr. Adler's classic guidebook: How to Read a Book furnishes instructions and advice that could assist information analysts and scientists in effectively accomplishing their work.

We performed a content analysis of Dr. Adler's autobiography: Philosopher at Large: An Intellectual Autobiography (1) to assess the extent of Dr. Adler's use of these techniques. Although analysis of the 137 headings in the subject index to the autobiography and the content of the titles to Dr. Adler's 238 collected works through 1977, comprising 26 books, 102 articles, and over 110 volumes of edited publications, did not reveal a single word or term which might be found in a thesaurus of information science terms, our analysis of the full text of the autobiography and construction of an index to it that was slanted toward information science terms did give a clear indication of the full extent of

Dr. Adler's use of these techniques, as will be seen in the following extracts.

INDEXING

> Indexing, I discovered early on, raises the skill of reading to the highest level.
>
> --p. 5

> From my own experience as an indexer, beginning with John Stuart Mill's Autobiography in my early years at Columbia, and then later my own books, I knew that an indispensable step is to discover the words or terms that express the author's conceptual apparatus.
>
> —p. 244

Dr. Adler's interest in indexing during his student days at Columbia University in the early 1920s served him well 20 years later when he conceived the idea for, designed, and assumed a leading role in the completion of the mammoth project of indexing the fifty-four volume set of the Great Books of the Western World (2), with its Syntopicon index to 102 great ideas of Western civilization. Almost 13 full pages of the total of 328 pages in the body of Dr. Adler's autobiography are devoted to describing this indexing effort.

> Why not construct an index to the great books which would, for each idea of basic importance, assemble the references to relevant passages in the books? Such an index would provide a map or chart of the conversation about fundamental subjects in which the authors of the great books engaged with one another across the centuries. It would enable the owner of a set of great books to use it as a reference library.
>
> --p. 238

Dr. Adler's enthusiasm for the project remained high throughout, despite the demands it made on his time, while he concurrently maintained a busy schedule of teaching and writing. The project was burdened with problems in the design and construction of the index and in time and cost overruns.

> I was commissioned to undertake the task of constructing the proposed index for which a budget of $60,000 was set up, the work to be done in two years. The task actually took seven years and cost nearly one million dollars.
>
> --p. 239

> It took nearly two years to sift through a provisional enumeration of about 700 terms culled from dictionaries of all sorts and to cut it down to size by dividing the terms which expressed truly basic concepts and those which expressed subordinate ones. At the end of the two years we had agreed upon 105 fundamental ideas, and these, with further work, we reduced to 102, each a constellation conjuring an orderly set of subordinate notions. As the work of indexing proceeded, the number of subordinate terms that

> fell into focus within the framework of a great idea increased. It reached two thousand when we finally constructed an alphabetical inventory of terms to help users of the Syntopicon locate a particular subject in the context of one or more of 102 great ideas.
>
> pp. 239, 242

The indexing work required the services of a scholarly staff of over thirty men and women working in Chicago, supported by a clerical staff of almost twice that size. The staff did more than 400,000 hours of reading for the index, portions of which were done by a then aspiring author and eventual Noble laureate.

> The work of indexing had begun in November 1943...The indexers were paid two dollars an hour...Milton's / Milton Mayer/ group included Saul Bellow, an aspiring but as yet unknown novelist. By the summer of 1944, we had accumulated about five thousand index cards...I remembered spending a good part of August playing solitaire with those cards, throwing them onto different piles on the bed, reshuffling them, and trying another play.
>
> --p. 245

By 1950, all of the index cards had been thoroughly shuffled, cross-referenced and placed in proper sequence within the 102 great idea headings comprising the Syntopicon, which was published in 1952, as part of the 52 volumes of the Great Books of the Western World.

BIBLIOGRAPHIES/CATALOGING/CLASSIFICATION

> At the time, I am sure that I did not understand the importance of making annotated bibliographies before one undertakes the serious study of a body of literature; nor had I any theory about the value of memorizing a set of related facts. It was twenty years later, when I came to write How to Read A Book, that I found myself laying great stress on the importance of becoming acquainted with a book, of paying attention to the title and scanning the table of contents in an initial effort to find out what the book is all about. The habit of cataloging and memorizing, which became perhaps the least unattractive of my analerotic compulsions--the need to order and arrange things and keep them rigidly fixed in the order I have imposed on them--had some virtue in it, as I realized later when I gradually came to understand the function that memory can perform in the service of thought.
>
> --p. 25

The importance of annotated bibliographies for books had first begun to impress Dr. Adler while he was a student and later a member of the faculty of Columbia University. During the same period, Dr. Adler first channeled his compulsion for the construction of bibliographies to the periodical literature:

> My friend John Storck had the habit of exploring the philosophical periodicals as I had explored the books in the College Study. Following his lead, I plunged into the bottomless pit of the periodical literature, more bemused than enlightened by the polemical attacks and counter-attacks that I found. However, these explorations did result in my constructing an almost complete bibliography of Professor Woodbridge's essays for the journals--he had published only one book at that time--and I read all of them that I could find.
>
> --p. 38

In addition to the above references to his compulsion for bibliographies and cataloging, on page 42 of his autobiography Dr. Adler also admits to a compulsion for classifying:

> Dr. Alexander was probably right in his diagnosis of my neurosis, springing from an analerotic compulsion toward orderliness that insists upon classifying things and putting everything into its proper place and keeping it there.
>
> --p. 42

KNOWLEDGE DATA BASE

> Summa theologiae, or Summa Theologica, a systematic compendium of Roman Catholic theology written by St. Thomas Aquinas between c. 1265 and 1273.
>
> --The New Encyclopaedia Britannica, 15th Edition

St. Thomas's Summa Theologica inspired Dr. Adler to design his own dialectical summation of thought--the Summa Dialectica. He conceived the idea for the Summa Dialectica in 1927, brought it closer to reality in the 1940s through the process of indexing the 102 ideas for the Syntopicon, and made it a reality in 1952 with the founding of the Institute for Philosophical Research. The primary aim of the Institute is to conduct dialectical research. To support this research, the staff of the Institute collects, organizes, and analyzes information on the great ideas. The process resembles that carried on within the field of information science as part of the development and operation of scientific and technical information claringhouses and data bases. Because the Institute is concerned with the surveying of "all human knowledge," we have arbitrarily used the heading "Knowledge Data Base" for this portion of our discussion. The scope of coverage for this knowledge data base is a broad one:

> I projected a Summa Dialectica--a modern counterpart of a mediaeval Summa Theologica in its aim to be a comprehensive summation of thought, but as different in plan and method from its mediaeval paradigm as night from day. Where the great political summations of the Middle Ages surveyed all human knowledge in an attempt to answer the widest range of questions about God and his creatures, as well as about man's destiny under divine Providence, and where they judged the truth of all possible answers in the light of both reason and faith, a Summa Dialectica would rigorously abstain from making comparable judgements, contenting itself with constructing a vast but

inherently uncomplete map of the universe of discourse in which theories (which may or may not be true) are placed in revealing logical relationships to one another.

--pp. 91, 92

The knowledge "products and services" from the Institute's continuing "survey of the basic ideas and issues in Western thought" have included lectures, seminars, and television programs on the great ideas, as well as published materials:

> The work done on the idea of freedom represents the kind of work--in method and in scope--that the Institute originally set out to do in the sphere of every basic idea. The reading that a sizable staff of researchers did, their discussions, and the successive drafts through which the writing went, in order to produce the 1,500 pages of the two volumes of The Idea of Freedom, took eight full years. The bibliography of books and articles referred to or examined is in excess of 1,300 titles by about 800 authors, ranging across twenty-five centuries of Western thought.
>
> --p. 269

By the time of publication of Dr. Adler's autobiography early in 1977, the Institute had made further steady progress in fulfilling its goals of knowledge analysis and dissemination:

> From 1956 to the present, the Institute has operated with a reduced budget and a reduced staff, but in that time, in addition to my two volumes of The Idea of Freedom, my associates have worked on and produced books about four other great ideas--the ideas of Justice, Love, Progress and Happiness. They are currently at work on still other ideas--Equality, Good, Art, Religion, and Beauty.
>
> —p. 279

READING GUIDEBOOK FOR ANALYSTS

Thus far we have attempted to demonstrate the use by Mortimer Adler, in his research and writings as a "knowledge scientist," of techniques that are typical of, but not the exclusive domain, of information analysts and scientists. We would now like to briefly draw attention to Dr. Adler's best known work: How to Read A Book (3) by emphasizing its value as a guidebook for the analysis of all textual materials, whether they contain information or knowledge. On page 205 of his autobiography, Dr. Adler discusses the 1972 version of How to Read A Book, which he revised in collaboration with Charles Van Doren.

> The revision provided guidance in reading other things than great books as well as specific rules for dealing with different kinds of reading materials; it put the fad of 'speed reading' in proper perspective by showing the importance of reading some things as slowly as possible while, at the same time, being able to inspect--inspect, not really read--everything as quickly as possible. In addition, by distinguishing four levels of reading--elementary, or fourth-grade, reading; inspectional, or speed reading; analytical, or interpretative, reading; and, finally, the syntopical reading of many books in

relation to one another--the revised version of How to Read A Book provided more thorough and more useful instruction than the original.

--p. 205

Many guidebooks on reading have been published since the first edition of How To Read A Book appeared in 1940. But the revised version of this book remains unsurpassed in furnishing a wealth of worthwhile advice for analysts. Information analysts, such as catalogers, abstractors, and indexers, who feel the need to improve their analytical reading skills would be well advised to study Adler and Van Doren's rules for inspectional and analytical reading; information scientists, such as researchers and reviewers, desiring to improve their interpretative reading proficiency, should concentrate on the instructions in How To Read A Book on the syntopical level of reading, as well as the two levels that precede it.

KNOWLEDGE SCIENTIST STILL AT LARGE

Although he is nearing his eightieth birthday, Dr. Adler has maintained a busy scholarly schedule. He is still the full-time director of the Institute for Philosophical Research and still works part-time, or leisure time as he is wont to call it, as a researcher and author. During this period, he has written two book-length knowledge analyses: Aristotle for Everybody (4), an introduction to Aristotle's thoughts "on the world of nature, the actions and productions of man, and the conduct of life;" and How to Think About God (5). The latter book is an introduction to theology for those in the twentieth century who "come to questions about God without any light derived from religious faith." It is based on Dr. Adler's own theories as influenced by his survey of the philosophical thought on the subject accumulated over the twenty-five centuries since the time of Plato.

Besides this evidence of his unabated use of his analytical faculties, Dr. Adler also has yet to overcome his "analerotic compulsion" for classifying, cataloging,and constructing annotated bibliographies. This fact was demonstrated clearly with the publication in 1977 of the Great Treasury of Western Thought (6). Dr. Adler once again teamed with Charles Van Doren to compile this 1771 page "compendium of important statements on man and his institutions by the great thinkers in Western history." Besides the compendium, the treasury, among other reference aids, also contains a "Subject and Proper Name Index, containing upwards of 50,000 entries." The closest comparable work in information science that comes to mind is Bernier's proposal for the compilation of terse (7) and superterse (8) literatures on scholarly, scientific, and technical conclusions.

REFERENCES

1. Adler, M.J. Philosopher at Large: An Intellectual Autobiography, New York, N.Y., Macmillan Publishing Co., Inc.; 1977.

2. Great Books of the Western World (52 vols.), Chicago, Encyclopaedia Britannica, Inc., 1952.

3. Adler, M.J. and Van Doren, C. How to Read a Book: The Classic Guide to Intelligent Reading, Revised and Updated Edition, New York, Simon and Schuster, Inc., 1972.

4. Adler, M.J. Aristotle for Everybody: Difficult Thought Made Easy, New York, N.Y., Macmillan Publishing Co., Inc., 1978.

5. Adler, M.J. How to Think About God: A Guide for the 20th Century Pagan, New York, N.Y., Macmillan Publishing Co., Inc., 1980.

6. Adler, M.J. and Van Doren, C. Great Treasury of Western Thought, New York, N.Y., R.R. Bowker Company, 1977.

7. Bernier, C.L. "Terse Literatures: I. Terse Conclusions," Journal of the American Society for Information Science, Vol. 21, No. 5, 1970, pp. 316-319.

8. Bernier, C.L. "Terse Literatures. II. Ultraterse Literatures," Journal of Chemical Information and Computer Sciences, 15(3), pp. 189-192, 1975.

SLANTED INFORMATION SCIENCE SUBJECT INDEX TO MORTIMER ADLER'S PHILOSOPHER AT LARGE: AN INTELLECTUAL BIOGRAPHY

BIBLIOGRAPHIES
25,38

CATALOGING/CLASSIFICATION
25,42

Data Bases see KNOWLEDGE DATA BASES/CLEARINGHOUSES

Guidebooks (Reading) see INFORMATION/KNOWLEDGE SCIENCE GUIDEBOOKS

How to Read a Book see INFORMATION/KNOWLEDGE SCIENCE GUIDEBOOKS

INDEXING
5,238-9,241-50

INFORMATION/KNOWLEDGE SCIENCE GUIDEBOOKS
25,155,201-06

Institute for Philosophical Research see KNOWLEDGE DATA BASES/CLEARINGHOUSES

KNOWLEDGE DATA BASES/CLEARINGHOUSES
91-2,237-8,261,267-281

Summa Dialectica see KNOWLEDGE DATA BASES/CLEARINGHOUSES

Syntopicon see INDEXING

Figure 1